

**Test Plan & Test Report
for
Face Recognition System
Database Subsystem**

2016/6/23

Zhang Rongzhi

Empire group in JLU

CONTENTS

1. Introduction.....	3
1.1. Background.....	3
1.2. Purpose.....	3
1.3. References.....	3
2. Testing Strategy.....	3
2.1. Overall Strategy	3
2.2. Testing Methods.....	3
2.2.1 Unit Test.....	3
2.2.2 System Test.....	4
2.2.3 Integration Test.....	4
2.3. Process Diagram	4
2.4. Testing Scope	5
3. Resources Requirement.....	5
3.1. Software	5
3.2. Hardware.....	5
4. Schedule	6
4.1. Milestones	6
4.2. Time Arrangement.....	6
5. Process Management	6
5.1. Document Management	6
5.2. Numbering Rules	6
6. Test Cases.....	7
6.1. Register Test.....	7
6.2. Login Test.....	7
7. Test Report.....	7
7.1 Register Test.....	7
7.2 Login Test.....	9

I . Introduction

1.1 Background

The system aims to design a face recognition system which connects facilitator, database and client through server. Facilitator is a module which gains final recognition results from different face recognition webs, such as facepp , mcs. Database is response to store the information of users and training result from facilitators. We will list actual situation when users use this system. Situation 1: Users register through client and their information sent by server will be searched in the database.

Situation2: Users login through client and server will send results from facilitators to database to store.

1.2 Purpose

Our subsystem, database, is response to store the message sent by server when users register or login. The system will mainly store the information, such as facilitatorIds, pictures.

1.3 Reference

- SRS V1.1 From Limeng Qiao in empire group
- Test Plan From Qian Tang in demons group
- Test Plan Example From Prof. Dali Li
- Test Report Example From Prof. Dali Li

II . Testing Strategy

2.1 Overall Strategy

Testing takes advantage of unit test to figure out logic errors in the program and system test to testify operation whether conform to requirements or not. After testing in every module, integration test combines four modules to verify availability of the whole system.

Testing requirements will be published in the early time of this project. According to requirements documents and architecture documents, testers will make a test plan about unit test and system test. Finally, when every developer in different modules finish their job and testers will begin integration test to verify the whole system function. Testers will record results in test report and analyze problems.

2.2 Testing Method

2.1.1 Unit Testing

Unit testing tests every function to figure out logic error and assure the availability of database module.

module	Function	Test method
DB.php	DB_connect()	Output debugging Pass parameters
	DB_getUID(\$username)	
	DB_creatUser()	
	DB_checkPwd(\$UID,\$password)	
	DB_getFacID(\$UID,\$FAC_type)	
	DB_putFacID(\$UID,\$FacType,\$FacID)	

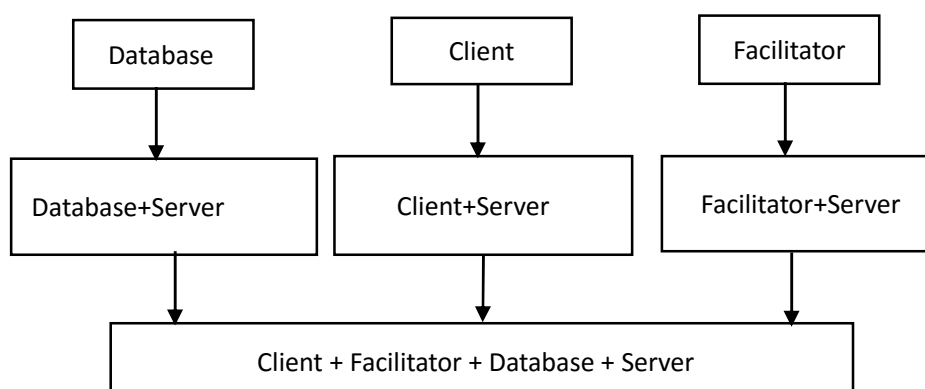
	DB_putMoreInfo(\$UID,\$UserID,\$Name,\$Gender)	
	DB_log(\$output)	
Login.php	DB_connect()	
Resister.php	test_input(\$FacilitatorIds)	

2.1.2 System Testing

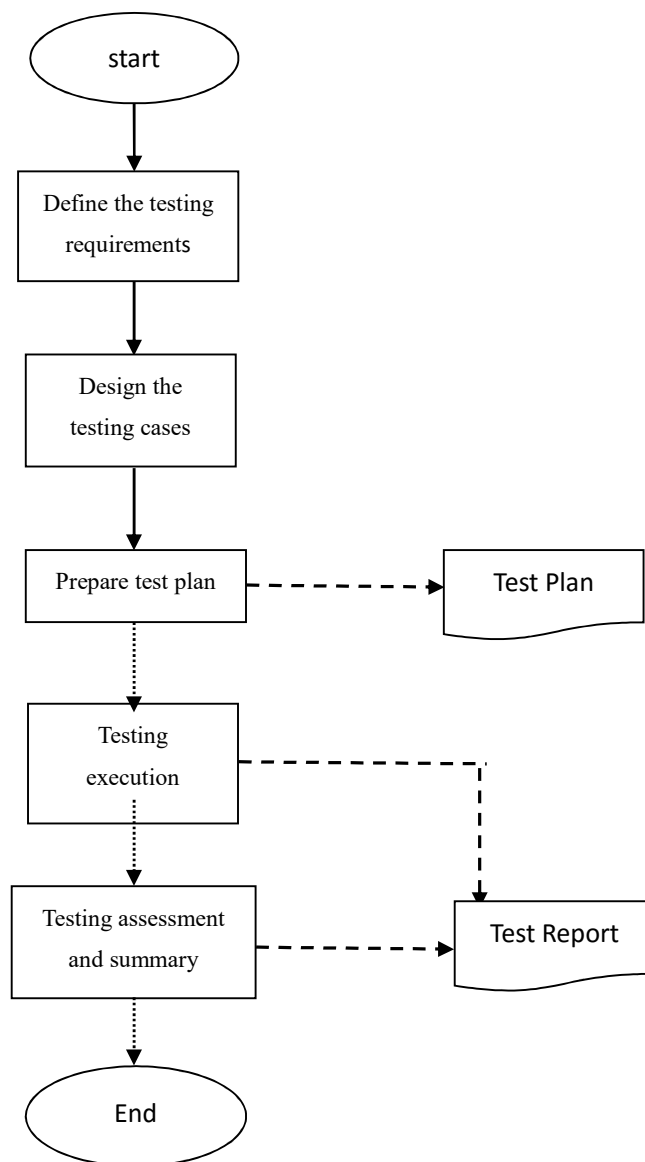
module	Parameters	Type	Expected result
Register	struct facilitatorIds struct picture	facilitatorIds { facId facType } Picture { pictureId base64 }	1. error code 1 the file is too large 2. error code 2 facilitator problems occurred 3. create successfully return userId
login	userId	string	1. error code 0 there \s not a face in that picture. 2. login successfully return facilitatorIds

2.1.3 Integration Testing

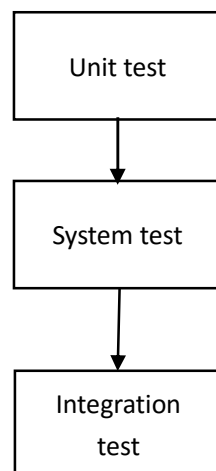
Integration testing divided into three process. Firstly, testers combine each module with server, because server is viewed as a medium which pass information. Then testers and developers in Four groups complete together and verify function of the whole system.



2.2 Process Diagram



Test requirements, plan and test case include three parts:



2.3 Testing Scope

Test method	Test scope
Unit test	Functions
system test	Resister module & login module
Integration test	Client & database & server & facilitator

III. Resources Requirement

- 1) Software:
postman, aliyun server , phpMyAdmin
- 2) Hardware:
PC

IV. Schedule

4.1 Milestone

In this project, we divide the test process into several milestones, in order to control the entire process.

Milestones	Completion Criteria
Test Requirements	Test scope defined Test requirements prepared
Test Design	Test cases covered all the requirements Test cases design completed
Test Execution	All the test cases executed Testing process recorded
Test Summary and Analysis	Testing summary report completed

4.2 Time Arrangement

Milestones	Start Date	Complete Date
Test Requirements	04-08	05-08
Test design	05-08	05-16
Test execution	05-16	05-21
Result analysis	05-21	05-22

V. Process Management

5.1 Document Management

Document	author	direction
Test Plan	Zhang Rongzhi	test method and test cases
Test Report	Zhang Rongzhi	test record and result analysis

5.2 Number Rules

5.2.1 Module Number

Module Name	Number
Register	01
Login	02

5.2.2 Test Case Number

In order to uniquely identifies test cases, we define the following numbering rules for test cases:
System Identifier . Subsystem Identifier . Module Number . Case Number

Name	Definition
System Identifier	Define the System Identifier as FRS(face recognition system)
Subsystem Number	Define the Subsystem Identifier as DB(database)
Module Number	List Above
Case Number	Defined by test case designer in order

VI. Test case

These test cases are used in the process of system test.

Test type	input	Expected result	Actual result
FRS.DB.01.1	facilitatorIds+pictures	success	userId
FRS.DB.01.2	base64 is too long	fail	Error code 1
FRS.DB.01.3	facType is unusual	fail	Error code 2
FRS.DB.01.4	FacId is too long	fail	Error code 2
FRS.DB.01.5	FacId is too short	fail	Error code 2
FRS.DB.02.1	userId	success	facilitatorIds
FRS.DB.02.2	userId is inexistent	fail	Error code 0

VII. Test report

Test type	module	time	input	Actual result
System test	Register. php	2016-05-18	{"facilitatorIds":[{"facId":"696c3ecd355c03bf86ad029a68b931cd","facType":"webB"},{"facId":"768dad68asf7sd87f6s8adds87f6","facType":"webC"}],"pictures":[{"pictureId":1,"base64":"asdnasljdbjasbsdkajbflksbfkasbfhfa"},{"pictureId":2,"base64":"Baseojdas	{"Success":true,"userId":"8e296a067a37563370ded05f5a3bf3ec"}

			fjbsjodsjabfkjbsadkñfjh"}}}	
System test	Register.php	2016-05-19	{ "pictures": [{ "pictureID": 1, "base64": "asdfs41va5d6feqfqfadfa" }, { "pictureID": 2, "base64": "Badsfdsafqefqefas" }], "facilitatorIds": [{ "facID": "768dad68sdfvvf1234erqweqds", "facType": "FacePP" }] }	{ "Success": true, "userId": "f7177163c833dff4b38fc8d2872f1ec6" }
System test	Register.php	2016-05-19	{ "pictures": [{ "pictureID": 1, "base64": "asdfs41va5d6feqfqfadfa" }, { "pictureID": 2, "base64": "Badsfdsafqefqefas" }], "facilitatorIds": [{ "facID": "768dad68sdfvvf1234erqweqds", "facType": "FacePP" }] }	{ "Success": true, "userId": "6c8349cc7260ae62e3b1396831a8398f" }
System test	Register.php	2016-05-19	{ "pictures": [{ "pictureID": 1, "base64": "asdfs41va5d6feqfqfadfa" }, { "pictureID": 2, "base64": "Badsfdsafqefqefas" }], "facilitatorIds": [{ "facID": "768dad68sdfvvf1234erqweqds", "facType": "FacePP" }] }	{ "Success": true, "userId": "d9d4f495e875a2e075a1a4a6e1b9770f" }
System test	Register.php	2016-05-19	{ "pictures": [{ "pictureID": 1, "base64": "asdfs41va5d6feqfqfadfa" }, { "pictureID": 2, "base64": "Badsfdsafqefqefas" }], "facilitatorIds": [{ "facId": "768dad68sdfvvf1234erqweqds", "facType": "FacePP" }] }	{ "Success": true, "userId": "9a1158154dfa42caddbd0694a4e9bdc8" }
System test	Register.php	2016-05-20	{ "facilitatorIds": [{ "facId": "696c3ecd355c03bf86ad029a68b931cd", "facType": "webB" }, { "facId": "768dad68asf7sd87f6s8adds87f6", "facType": "webC" }], "pictures": [{ "pictureId": 1, "base64": "asdnasljbjasbsdkajbflksbfkasbfhfa" }, { "pictureId": 2, "base64": "Baseojdasfjbsjodsjabfkjbsadkñfjh" }] }	{ "success": false, "errors": [{ "errorCode": 1, "errorMessage": "error:input" }] }

System test	Register.php	2016-05-20	{"facilitatorIds":[{"FacType":"facepp","FacId":"c581d0941857393939e5f6045f46ee25"}]}	{"success":true,"userId":"093f65e080a295f8076b1c5722a46aa2"}
System test	Register.php	2016-05-20	{"facilitatorIds":[{"facId":"696c3ecd355c03bf86ad029a68b931cd","facType":"webB"}, {"facId":"768dad68asf7sd87f6s8adds87f6","facType":"webC"}], "pictures":[{"pictureId":1,"base64":"asdnasljdjbjasbsdkajbflksbfkasbfhfa"}, {"pictureId":2,"base64":"Baseojdasfjbsjodsjabfkjbsadkñfjh"}]}	{"success":false,"errors":[{"errorCode":1,"errorMessage":"error:input"}]}
System test	Login.php	2016-05-18	{"userId":"8e296a067a37563370ded05f5a3bf3ec"}	{"success":true,"facilitatorIds":[{"FacType":"fpp","FacId":null}, {"FacType":"webB","FacId":null}, {"FacType":"webC","FacId":null}]}
System test	Login.php	2016-05-19	{"userId":"9a1158154dfa42caddbd0694a4e9bdc8"}	{"success":true,"facilitatorIds":[{"FacType":"fpp","FacId":"768dad68sdfvvf1234erqweqds"}, {"FacType":"webB","FacId":null}, {"FacType":"webC","FacId":null}]}
System test	Login.php	2016-05-20	{"userId":"32bb90e8976aab5298d5da10fe66f21d"}	{"success":true,"facilitatorIds":[{"FacType":"fpp","FacId":null}, {"FacType":"webB","FacId":null}, {"FacType":"webC","FacId":null}]}
System test	Login.php	2016-05-21	{"userId":"32bb90e8976aab5298d5da10fe66f21d"}	{"success":true,"facilitatorIds":[{"FacType":"fpp","FacId":null}, {"FacType":"webB","FacId":null}, {"FacType":"webC","FacId":null}]}
System test	Login.php	2016-05-21	{"UserId":"ea5d2f1c4608232e07d3aa3d998e5135"}	{"success":false,"errors":[{"errorCode":0,"errorMessage":"The user does not exist"}]}